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Tabicman et al.

[11] **4,167,266**

[45] **Sep. 11, 1979**

[54] **INDOOR GOLF DRIVING RANGE**

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[51] **Int. Cl.**[2] **A63B 69/36**

[52] **U.S. Cl.** ..... **273/35 B;** 273/176 A; 273/182 R; 273/184 R

[58] **Field of Search** ..... 273/182 A, 182 R, 176 A, 273/181 E, 35 B, 184 R, 176 F, 176 FA, 32 R, 185 R, 185 A, 185 B

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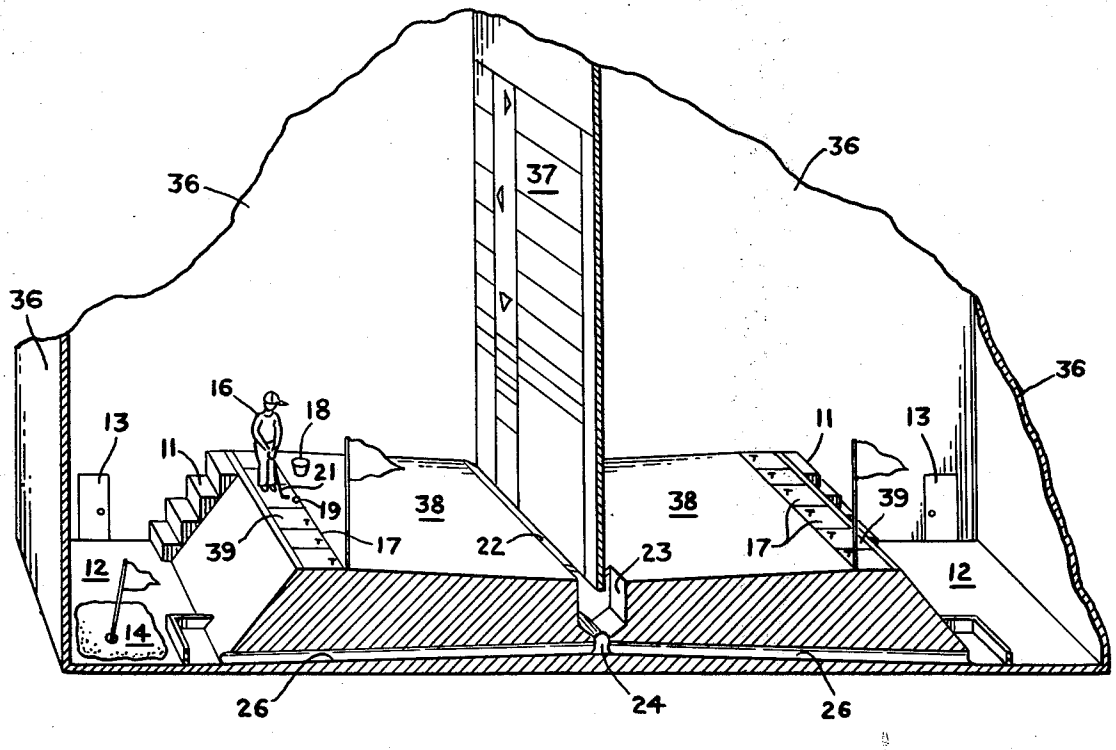
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[57] **ABSTRACT**

An indoor golf driving range within a pressurized tent cover having a target backstop in the center with a driving range on each side with a system for collecting and returning balls to a specific point for reuse. The target is positioned and marked to show if the ball hitting the target has the proper loft with the particular hitting club used. The target backstop may be electrically wired to indicate by lights where it is contacted by a driven golf ball.

6 Claims, 4 Drawing Figures



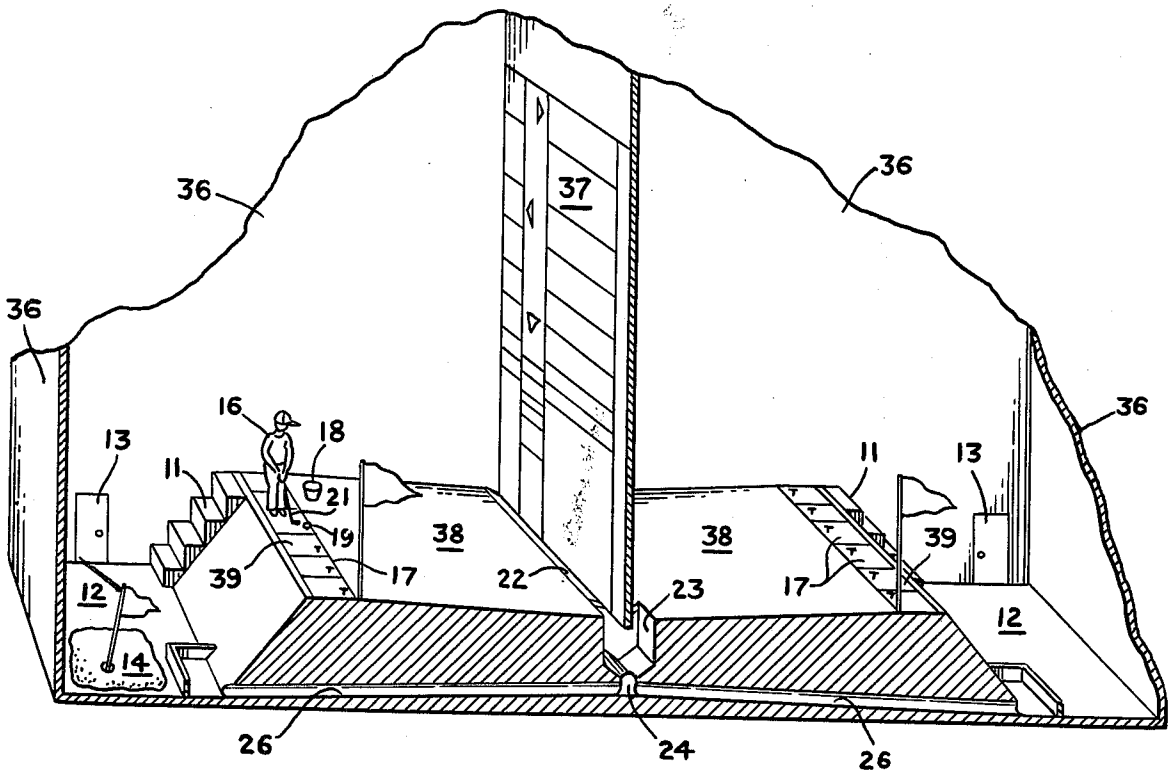

36
36
37
36
36
16
18
13
11
21
19
38
38
11
13
39
39
17
22
23
17
12
12
14
26
24
26

FIG. 1

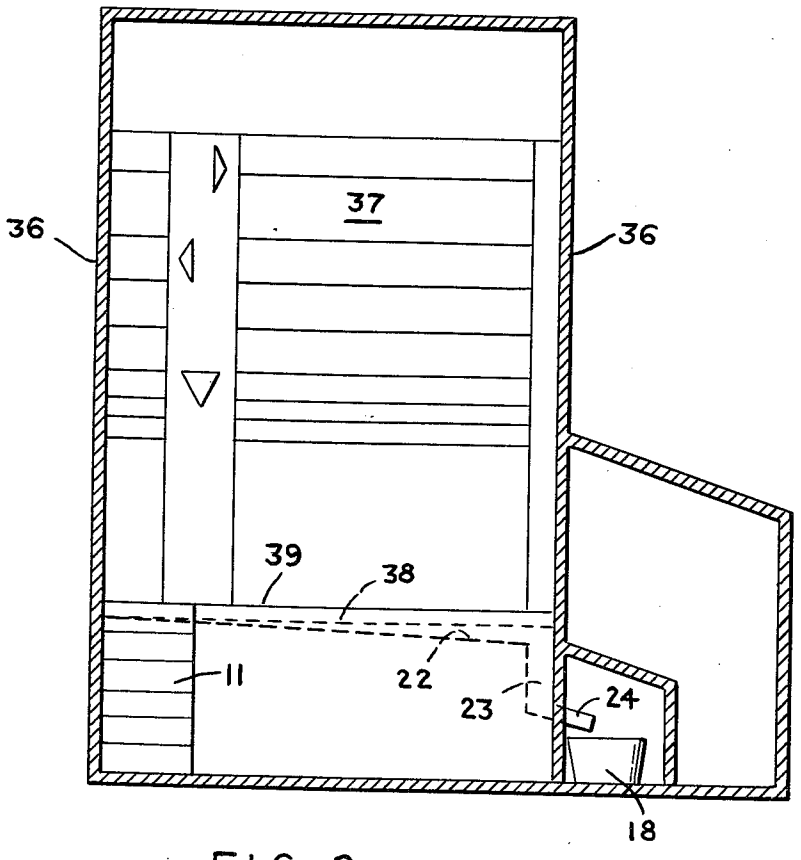

37
36
36
39
38
11
22
23
24
18

FIG. 2

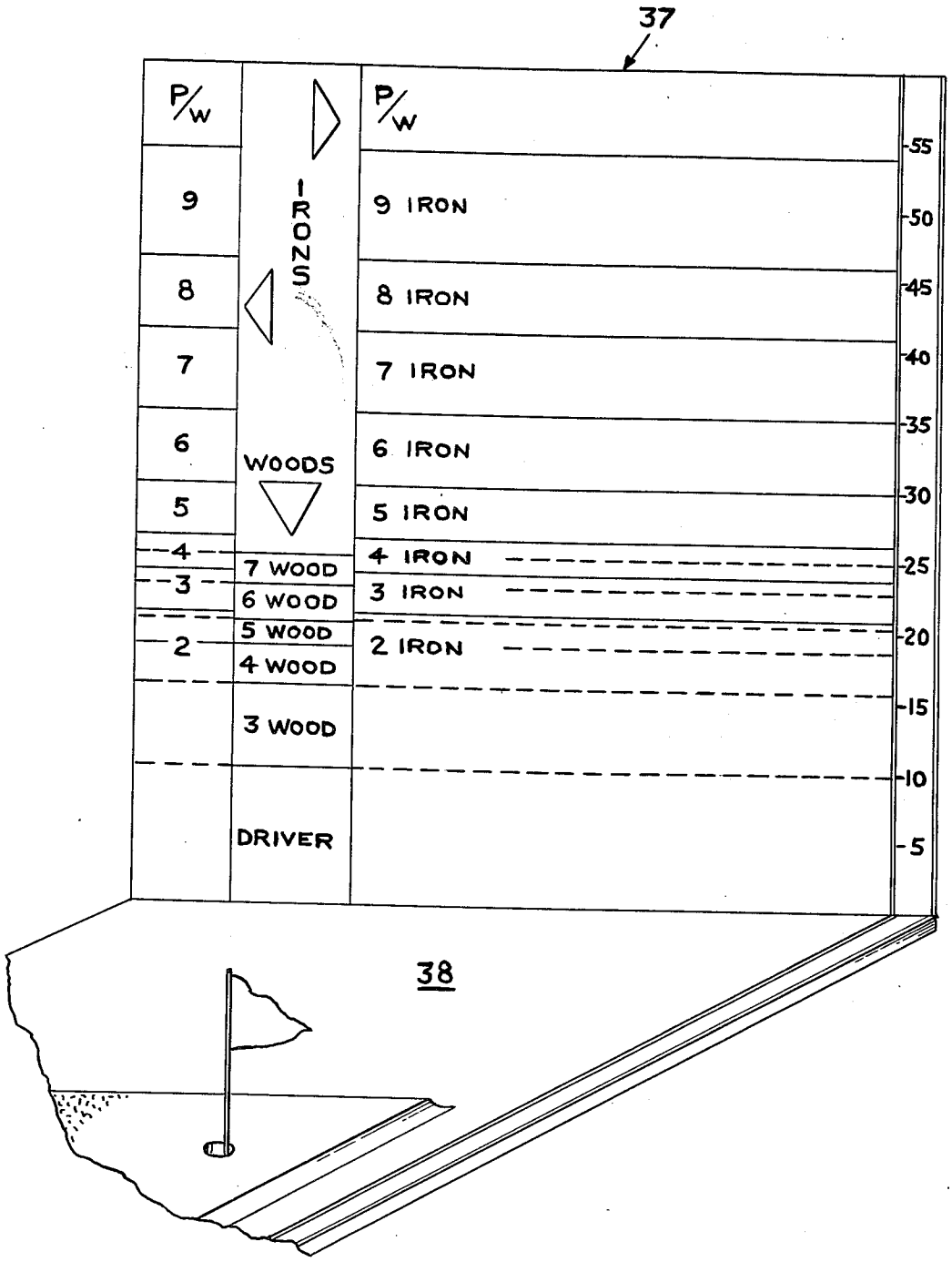

37
P/W
9
8
7
6
5
4
3
2
IRONS
WOODS
7 WOOD
6 WOOD
5 WOOD
4 WOOD
3 WOOD
DRIVER
P/W
9 IRON
8 IRON
7 IRON
6 IRON
5 IRON
4 IRON
3 IRON
2 IRON
55
50
45
40
35
30
25
20
15
10
5
38

FIG. 3

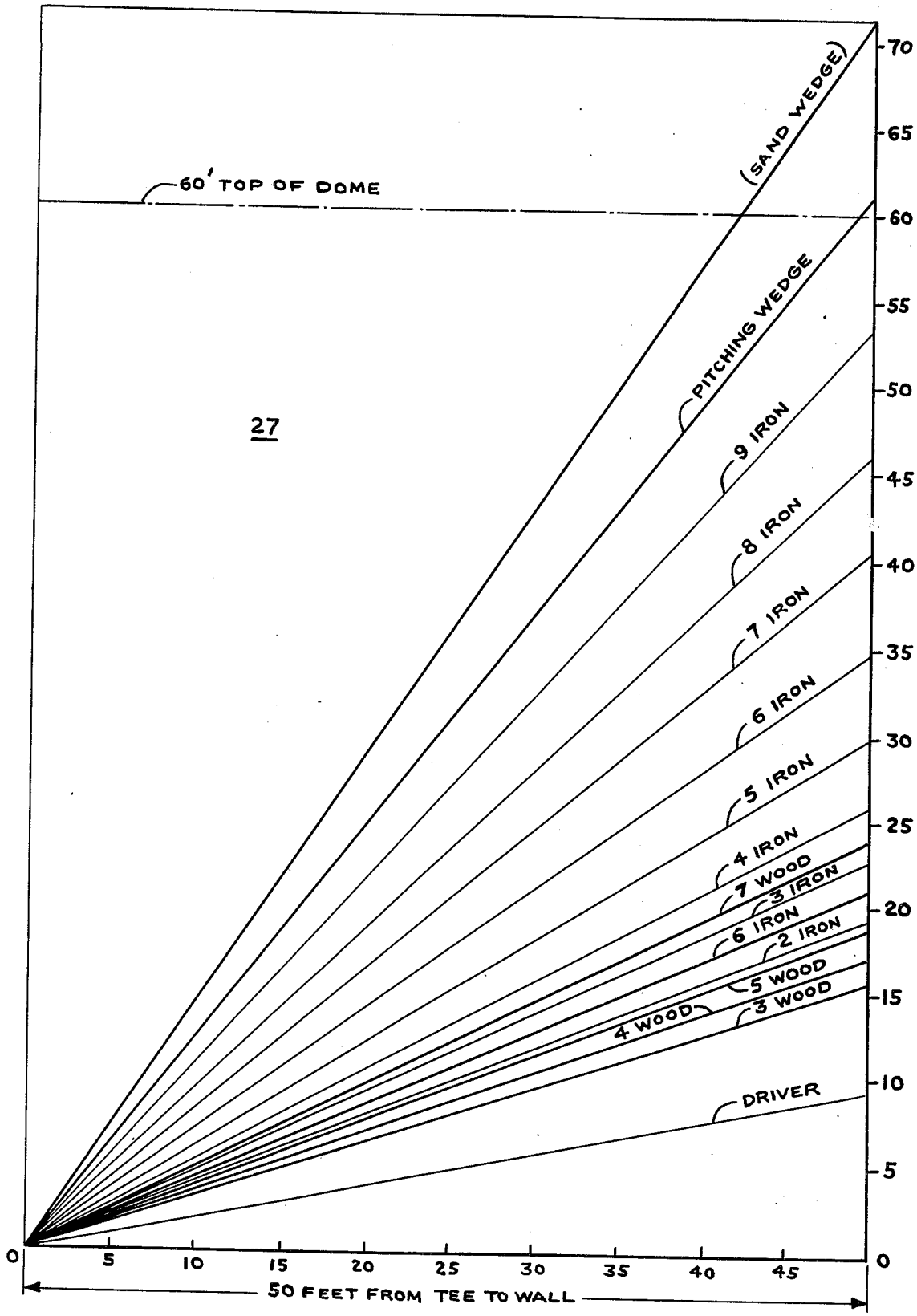

60' TOP OF DOME
27
(SAND WEDGE)
PITCHING WEDGE
9 IRON
8 IRON
7 IRON
6 IRON
5 IRON
4 IRON
7 WOOD
3 IRON
6 IRON
2 IRON
5 WOOD
4 WOOD
3 WOOD
DRIVER
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
0
5
10
15
20
25
30
35
40
45
50 FEET FROM TEE TO WALL

FIG. 4

INDOOR GOLF DRIVING RANGE

BACKGROUND OF INVENTION

This invention relates to new and useful improvements in indoor golf driving ranges and more particularly seeks to provide a driving range with ball return using a backstop that is positioned and marked to determine when hit by a driven ball whether the ball was correctly stroked according to the selected club.

Golf driving ranges are commonly located outside because the distance needed for the longest driving wood is up to 300 yards, which would be very expensive to cover. However, much enjoyment and practice can be accomplished at a driving range without the facilities of a full golf course.

Tennis courts are quite often indoors, e.g., covered by an air-supported tent because the space requirement for tennis is much less than for golf driving ranges.

It is desirable to know without benefit of a third party or expensive golf pro whether the ball has been correctly hit, particularly when using a driving range for practice purposes.

OBJECTS OF INVENTION

It is an object of this invention to provide a short, driving range with a backstop, all being under cover.

It is a further object to optionally have a common backstop to which dual ranges are directed from either side.

It is another object to have the backstop positioned and marked whereby noting where the driven ball strikes same will indicate whether the ball was properly hit with the particular club selected by the player, thereby permitting the player to adjust his swing or change his club to secure proper results.

It is also an object to provide automatic indication of where the ball hits as well as automatic collection and return of the balls to the player's driving area or to the manager for reuse or resale.

SUMMARY OF INVENTION

A backstop extends from the floor to ceiling in a building with a driving range on at least one side extending to the tees or driving areas. The backstop is appropriately marked to show where a ball should strike if properly lofted by the selected club. In addition, the floor surface is arranged for the balls to be automatically returned to a point where an operator or the driver can regain the balls. For space economy, the backstop may be centered in the building with a driving range on both sides extending toward the ends of the building.

With these and other objects, the nature of which are apparent, the invention will be more fully understood by reference to the drawings, the accompanying detailed description, and the appended claims.

DETAILS OF THE INVENTION

In the Drawings

FIG. **1** is a perspective view of an indoor double-driving range constructed in accordance with this invention;

FIG. **2** is an end view taken from the left end of FIG. **1**;

FIG. **3** is a detailed view of one side of the backstop; and

FIG. **4** is a diagrammatic chart showing the height at which a golf ball should strike the backstop at given distances from the tee for various clubs if properly hit by the player.

As illustrated, there is shown in FIG. **1** an inflated building **36** divided into halves by a backstop **37** with each half having a long surface **38** sloping toward the backstop, a tee area **39**, steps **11** and entrance area **12**.

The player enters the entrance area **12** through door **13** and may stay in this area for drinks, food or other waiting activity prior to or after driving golf balls. Moreover, a putting green **14** may be provided in this area. When desired, the player **16** may mount steps **11** to the individual tee **17** in tee area **39** to be provided with a bucket **18** of golf balls **19**.

The player having chosen any given club **21** drives the ball toward and against the backstop **37**. The balls generally drop into channels **22**, or if the ball falls on sloping surface **38**, they roll into channel **22** and thence along the sloped channels **22** into pit **23** which is provided with a slot **24** at the bottom under which a bucket **18** may be set to collect balls.

Although bucket **18** and slot **24** are shown outside of the exterior wall of building **36**, the slot may be reversed so that everything is within the building **36** with a small door for the operator to reach the bucket.

In the alternative, a channel **26** may run from slot **24** back to each entrance area. Either channel **26** may be blocked at slot **24** so that the balls at any given time run to one entrance area only. In addition to gravity returning the golf balls, mechanical means may be utilized to collect and return balls.

FIG. **3** shows the detailed design of the backdrop **37** with the areas where a properly hit ball will strike from the appropriate club with irons being shown on the left, woods at left center, irons again to the right of the woods and the actual height in feet at the right margin of the backstop. The different areas may be further distinguished by different colors. In addition, an electrical system may be installed to the backstop to make contact and light appropriate lights for the given area when hit by a ball.

The chart **27** shown in FIG. **4** can be used to determine the spacing of the backstop from the tee and the level at which to put the various club levels for a given space. The driving face of clubs have a standardized lofting surface which determines the lift according to the following table:

Club	Loft	Average Distance
Wood	10°–12°	220 yards
3 Wood	16°–18°	210 yards
4 Wood	19°–21°	200 yards
5 Wood	22°–24°	190 yards
2 Iron	20°	180 yards
3 Iron	23°	170 yards
4 Iron	27°	160 yards
5 Iron	31°	150 yards
6 Iron	35°	140 yards
7 Iron	39°	130 yards
8 Iron	42°	120 yards
9 Iron	47°	110 yards
Pitching Wedge	54°	90 yards
Sand Wedge	58V	70 yards

We claim:

1. An indoor golf driving course comprising a flexible building maintained in erected condition by air pressure retained therein, a backstop extended from the floor to

ceiling and positioned toward the center of said building, a driving range extending from each side of said backstop toward the corresponding end of said building, a tee area located near each said corresponding end; said backstop being marked on both sides in accordance with the distance from said tee area to show correct loft of a golf ball hit by a given club at said tee area; and means to return to a given point said balls that were driven from said tee area toward said backstop.

2. The course of claim 1 wherein the surface from said tee area slopes downwardly toward said backstop, and a channel is provided at the bottom of said backstop that slopes toward and terminating in a pit at one end of said backstop at said given point.

3. The course of claim 2 wherein said pit is adapted to receive a container for golf balls flowing therein from said channel.

4. The course of claim 2 wherein a second channel slopes downwardly from said pit and extends back toward the corresponding end of said building.

5. The course of claim 4 wherein said backstop is electrically wired to indicate by lights where said backstop is contacted by a driven golf ball.

6. An indoor golf driving course comprising a backstop within a building, a driving range extending from said backstop toward one end of said building, a tee area located near said one end; said backstop being marked in accordance with the distance from said tee area to show correct loft of a golf ball hit by a given club at said tee area and being electrically wired to indicate by lights where said backstop is contacted by a driven golf ball; and means to return said balls to a given point that were driven from said tee area toward said backstop.

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